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(54) Title: SYSTEM AND METHOD FOR MANAGING A REGISTER-BASED STACK OF OPERAND TAGS

(57) Abstract: A virtual machine in a processing system manages type information for operands. In one embodiment, the virtual machine accomplishes the following results through execution of a single instruction: adding an operand tag to a tag stack, and updating a stack pointer for the tag stack to recognize the addition of the operand tag to the tag stack. The single instruction may be a shift instruction, for example. The tag stack may reside in a tag stack register, and each operand tag may indicate whether a corresponding operand on an operand stack is to be treated as a reference operand or a non-reference operand. Other embodiments are described and claimed.

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